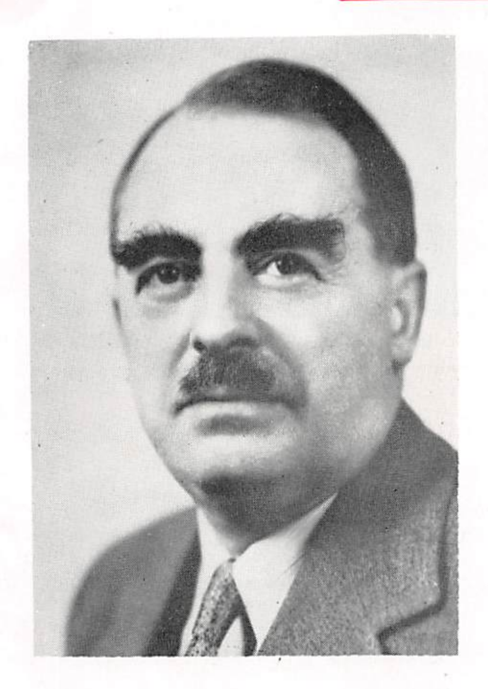
Now It's History

By A. CYRIL CALLISTER, M.D.



I have been asked to document the facts concerning the history of the founding of the four-year Medical School of the University of Utah.

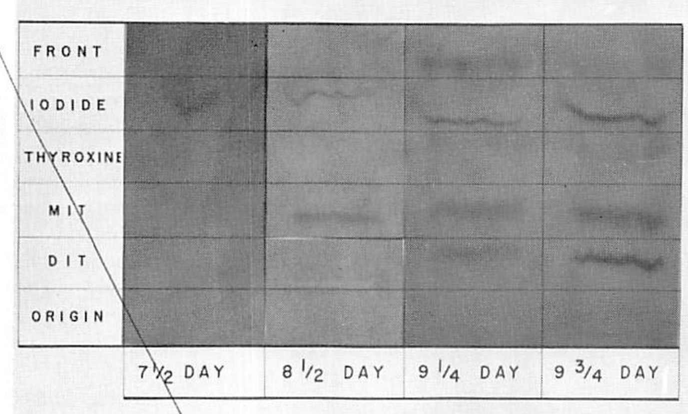
For some time the methods of instruction in medical schools had been undergoing radical changes; the first two years had been devoted to didactic and laboratory instruction, and the second two years to clinical instruction. This method was becoming archaic and practically all four-year medical schools had been introducing more and more clinical instruction into the first two years. As a result, the transfer of students from a two-year school to the third year status of a four-year school, was becoming increasingly difficult. For this reason the Council on Education of the American Medical Association had been anxious for the two-year schools to expand to a four-year curriculum.

After several years of advocacy and with the favorable attitude of Governor Herbert B. Maw that the University of Utah Medical School be expanded to a four-year school, the Board of Regents of the University went on record that a four-year medical school be developed. One of the several provisos made by the Board of Regents was that a suitable Dean be found. Dr. Daines, formerly Dean of the two-year Medical School, had died prior to this time. I was selected to be the Dean of the new Medical School, with all the attendant difficulties and also those that lay before me. Little did I realize that these difficulties would be so many and so great. The Board of Regents appointed a Committee consisting of Dr. L. E. Viko, Earl J. Glade and A. Hamer Reiser, to aid and supervise the establishment of this four-year medical school.

When I took over the duties as the new Dean, I immediately found myself in a hornets' nest. Three of the department heads in the medical school had deanship aspirations, and one of them had waged an active campaign at the University and among the "downtown doctors" to be appointed to that position. He was never able to reconcile himself to my appointment. A survey of the two-year school, and an evaluation of the instruction at the two-year school, had been made by Dr. Weiskotten for the Council on Medical Education of the American Medical Association, and it was obvious from this report that certain department heads would have to be dropped and others demoted in order to bring the instruction up to a satisfactory level. This made my job much more difficult, especially since my predecessor, Dr. Daines, had been treated with disdain and disrespect by some of the department heads. Dr. Daines, one of my closest friends, was a very lovable man but he was not a fighter, and he had frequently confided in me concerning the situation at the Medical School, stating that if the Board of Regents could find a more suitable man to organize the expansion of the School,

Figure 8:

(A) Each of these chromatograms shows that the embryonic gland has learned to do one new thing since the preceding measurement of ability was made. The sequence in which these synthetic steps are acquired is the same, incidentally, as that observed in the artificial production of thyroxine through the iodination of casein.



(B) Once the ability to produce thyroxine is fully established (day 10), no new compounds appear. If triiodothyronine is present here, it would not show since it runs to almost the same point as thyroxine in this solvent system.

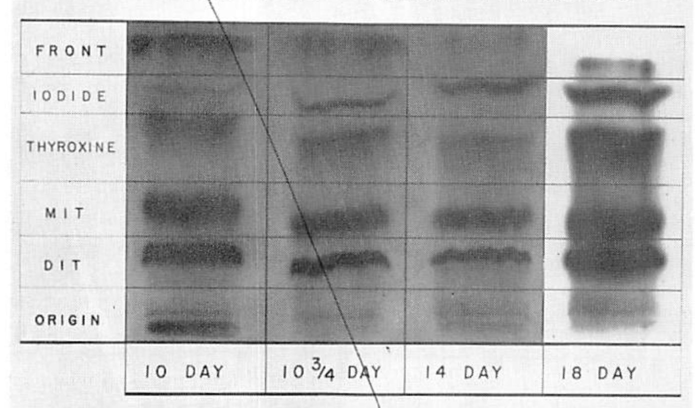
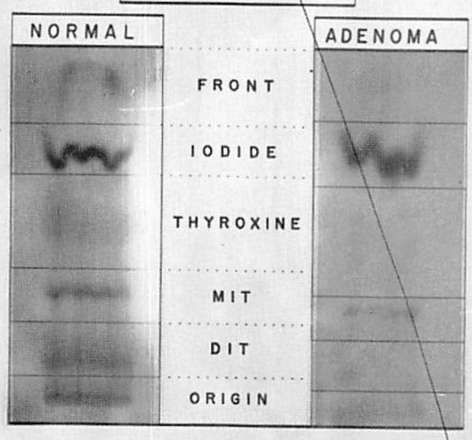


Figure 9:

Radiochromatograms of normal and adenomatous thyroid tissue removed simultaneously from a 28 year old female who had received 500 microcuries of radioactive iodine 24 hours before operation. The normal tissue is functioning as it should, but the adenoma cannot perform the step between monoiodotyrosine and hence has no substrate (diiodotyrosine) from which to make thyroxine. Compare this with the chick embryo at 8½ days of incubation.



he would be glad to turn the job over to someone else. I, therefore, had some forehand knowledge of the situation I was to meet.

It was not long before I discovered considerable misapprehension and some definite antagonism among the faculty of the other schools of the University proper toward the four-year Medical School. There was a general fear that it would become the tail that would wag the dog — particularly from the budget aspect. This feeling became more and more apparent as time progressed. Also, when it became known that some department heads would be dropped and others demoted, the fraternalism that exists among professors having tenure, as members of the Society of University Professors, with a local representative on the University of Utah Law faculty, increased their antagonism toward me. In those days the University had on its faculty an Advisory Council, whose apparent purpose was to advise the President of the University and the Board of Regents as to what they should and should not do. I was summoned before that Council on several occasions (almost daily for a while) and was berated and actually insulted until I finally refused to obey the summons to attend the meetings. This Council placed the President of the University in a most difficult position, as he was attempting to aid me in the organization of the Medical School. However, several members of the Council had held equal faculty status with the President for many years and felt that they knew as much, if not more, about administration than did the President.

A supreme difficulty that presented itself was the problem of developing a four-year school without a hospital to teach the diagnosis and care of sick people; without a hospital where the clinical professors must have offices and headquarters, and where the clinical professors must have facilities and resources and personnel to conduct research. After a great deal of work and persuasion on my part, the Board of County Commissioners agreed (and particular credit must be given to Commissioner Roscoe Boden for securing this agreement) that the Medical School would be allowed to use the facilities of the Salt Lake County General Hospital for teaching purposes, provided that the Medical School would give complete medical care to the patients without cost to the County. A legal contract to this effect was drawn up by Dean Leary of the Law School and entered into by the Board of Regents of the University of Utah and the Board of Salt Lake County Commissioners. This was a mere beginning, because many were the trials and tribulations that the clinical professors faced in securing office space, space for their clinical staff, for their investigative work, their medical library, etc.

The next obstacle to be met and overcome was the financial one, especially with only one hundred and fifty dollars remaining in my budget with which to organize a Medical School. My staff in the Dean's Office consisted of a secretary whom I employed, Florence Strong, whose loyalty, ability and efficiency were most remarkable. Her appointment and her salary were approved by the Regents. I set my own salary at one hundred sixty-six dollars per month to demonstrate that I had no financial interest in the position.

Probably the most important task before me was the recruitment of a faculty, for which I had to travel to the eastern United States to visit medical schools. I realized that the men I selected had to be well known in medical education, for their ability to teach, their national status in research work, and their capability of organizing a department in the Medical School. Two men whose interest and work in helping me to get these teachers with the above qualifications were Alan Gregg, Director of the Rockefeller Foundation for Medical Education, and an old friend of my Harvard Medical School days, and Dr. Irving McQuarrie, a former Utah boy who had attained the position as Head of the Department of Pediatrics at the University of Minnesota Medical School.

Continued on page 26

Wives Tales

By MRS. SIDNEY PRIDAY



Difficult for us to realize that it has been more than nine years since Sid graduated from the University of Utah Medical School; June 5, 1945, a momentous occasion. We were sure then that life's problems had been licked and we needed only to go on and claim our just rewards. There have been times since then, however, when I think Sid has looked back upon Medical School as a sheltered haven. At any rate, we both remember our era at the University with nostalgia, albeit it was no bed of roses. The pleasure lay in the fact that we went through school with such a good group. . . . the George Spendloves, the Aaron Rosses, the Tom Baumans, the Jack Trunnells, the Garth Edmunds, the Ralph Richards. They took us to dinner at the Hotel Utah last March and we found them just as delightful as ever. Sid thought most of the professors were splendid, too. . . . Wintrobe, Price, Holmstrom, etc. In the course of Sid's five-plus years of practice here in the Bay Area, he has brushed with doctors from many medical schools and he has yet to feel anything but pride in his training at Utah. Jack Trunnell said the same thing when he visited us here last June.

After Sid's graduation from medical school, we went to Minneapolis where Sid interned at the Minneapolis General Hospital. We found Minneapolis an enchanting city and we were tempted to stay there. However, a hitch in the Army changed our plans.

Sid was sent from Minneapolis by the Army to Whipple, Arizona, and from there to Oakland Veterans Hospital, California. Here he spent most of his two years' Army duty and felt that he received excellent training at the Veterans Hospital in the Surgery Department. The irresistible climate and the

Now It's History

(Continued from page 9)

I shall never cease to be grateful to them. I personally financed this campaign but felt that the sacrifice was well worth while — also, I had the bull by the tail and could not let go.

I did not have much to sell these men to entice them to leave the positions they held, but, with determination and boundless enthusiasm, I promised them many things that we did not have at Utah, but which I was determined that we would get. I pointed out to them that it was a new school; that they would be pioneering in medical education; that, in the creation of their courses of instruction, they would not be held back by tradition nor hampered by a rock-bound or hidebound curriculum already established. I think that this argument carried more weight with them than anything else I might have said. Of course, when they arrived and saw how little they had to work with, some of them confided to me later that they felt like turning around and going back where they came from. However, their difficulties seemed to spur them on and they certainly dug the spurs into me to get them what they needed and what I had promised them. The entire picture brightened as Governor Maw, to whom the Medical College owes much for its establishment, decreed that the budget of the Medical School should be a distinct and separate entity from the budget of the University of Utah proper. This relieved a little of the pressure until word got around that I had employed four men as heads of departments at a salary of eight thousand dollars each on a four-quarter teaching basis, when the top salaries within the general University amounted to forty-five hundred dollars a year. I was advised at one of the Advisory Council meetings by one of the professors that his Ph.D. was as good as any "whippersnapper's M.D." that I had brought in. I merely replied that if this were true it should provide a leverage to increase his salary, and that I had to pay the going scale to secure men of the quality that I had brought in.

Everywhere I turned we needed money. So, after much effort on my part, the First Presidency of the L.D.S. Church gave me $25,000.00 which was spent in setting up adequate quarters for the physiology and pharmacology laboratories. Alan Gregg gave us another $25,000.00 from the Rockefeller Foundation, stating that he had no specific basis on which he was awarding it, but he knew we needed help. After a great deal of persuasion Mr. D. D. Moffat secured $25,000.00 from the Kennecott Copper Corporation to aid in the establishment of the Medical School. Other contributions were coming in from physicians themselves. The pioneering spirit and the determination of our faculty were such that the Head of our Department of Obstetrics and Gynecology and his assistant were both helping manually to build and remodel the old contagious disease building on the County Hospital grounds to set up an obstetrical and gynecological pavilion.

In the meantime, the Medical School department heads were selecting and appointing physicians on the basis of a dollar a year as teachers in their departments. Inasmuch as the Medical School was now a going concern, many of the older and more prominent physicians who had previously fought the establishment of the School because they said it could not be done, hastened to climb on the band wagon as it became an honor to be on the School's faculty and gave them added prestige in the community. We graciously welcomed them as we needed them for their ability and experience in teaching and for their friendliness toward the Medical School. However, we were not so fortunate with some other downtown physicians. Some, who had been prominent in the advocacy of the expansion to a four-year school, now wished to be rewarded with professorships and positions as heads of departments, and to continue to practice privately. This, at an early date in the formation of the Medical School, was one of the im-

the first, faint smudge of thyroxine is seen (day 9¾) and is fully present by day 10. From this point on, the thyroid adds no new compounds — only more of each.

Chick thyroid cells do not need to be in chicks in order to undergo this kind of development. At least, if they are left in the living embryo for at least the first seven days of incubation, they may then be grown in tissue culture and will acquire all of the abilities shown above. The interesting disclosure which has been made in this connection (by Dr. Gonzales of our group), however, is that the abilities are not long maintained. Within one day after such cultured cells learn to make thyroxine, they have lost the ability to do so. By the next day they have lost the ability even to make diiodotyrosine. They have, in fact, gone part way back down the embryonic stairway.

To return to the question of human thyroid tumors, we began administering doses of radioactive iodine to patients 24 hours prior to thyroidectomy. Small bits of their adenomas and of their remaining normal thyroid tissue were then processed almost exactly as the chick tissues were. As Wegelin had suspected from purely morphologic observation, some of these tumors were only partially differentiated. We have found examples of adenomas corresponding to every one of the stages of development shown in Fig. 8A, and some that were so poorly differentiated (from a biochemical point of view) that they could not even trap iodide. Some, on the other hand, appear to be "super-differentiated" (a few in the so-called "toxic adenoma" group). Fig. 9 shows the radiochromatogram produced from an adenoma in a 28 year old female. It is able to trap iodide and to make monoiodotyrosine but can make neither diiodotyrosine nor thyroxine. This adenoma, then, is comparable with the chick embryo thyroid which has been incubating for 8½ days. Did the adenoma arise from cells which never developed beyond this point in our patient's fetal days, or did it arise from cells which had once been adult and which, like those in tissue culture, slipped halfway back down the steps? Could its cells be made adult again by re-exposure to the forces or substances that normally guide the development of the embryonic gland? If adenoma cells so respond, would cancer cells do likewise? We look with great hope to our future efforts to provide answers to these stimulating and fundamental questions, since it seems safe to assert that what happens in the thyroid is basically the same process that governs the differentiation of other tissues as well.

A note about the author:

B.A., Brigham Young University, 1942.
M.D., University of Utah, 1945.
Interned, U.S. Naval Hospital, Great Lakes, 1945-46.
Assistant Resident in Medicine, Memorial Hospital, N.Y.C., 1946-47.
Fellow, Sloan-Kettering Institute, N.Y.C., 1946-48.
Assistant, Division of Clinical Investigation, Sloan-Kettering Institute, N.Y.C., 1948-50.
Instructor in Medicine, Cornell Medical School, 1948-50.
Consultant in Medical Uses of Radioisotopes, Brookhaven National Laboratory, Upton, N.Y., 1948-50.
Head, Section of Experimental Medicine, University of Texas, M. D. Anderson Hospital and Tumor Institute, Houston, 1950- and Assistant Professor of Medicine, University of Texas Post Graduate School of Medicine, 1950-.
Still have the same wife, 3 and one-third kids, and am as lousy a golfer as ever, but think I could beat Ed Budge and Merrill Daines on a good day. My church friends may be interested to know that things were so bad in Texas one day last October, I had to be resorted to as president of the New Houston Stake.

Psychiatric Hospitals

(Continued from page 17)

ence with the National Draft Act for Hospitalization of the Mentally Ill" and his report has been published in the American Journal of Psychiatry, November, 1952. Subsequent experience has seemed to verify and substantiate this early evaluation.

We are sure that the law as embodied in Section 64 Chapter 7 of the Utah Code Annotated 1953 is modern, humane and practical. If understood and used properly it will help us to more adequately meet some of the problems of mental illness in Utah.

For clarification of details or more information you are invited to get in touch with the Public Welfare Commission or the Superintendent of the Utah State Hospital, Provo, Utah.

portant things we decided could not be done, for obvious reasons. Heads of departments and their immediate assistants were appointed on the basis that they would devote their time entirely to teaching, research, administrative work in their own departments, and they were limited to consultive work when called upon to aid a practicing physician who requested the help of one of the full-time teachers to solve a diagnostic problem in which the professor was particularly well trained. So these unhappy downtown doctors pinned on me the title of "part-time Dean," (I was still doing some practice of surgery) and demanded through the newspapers and later to the Board of Regents of the University, that I resign and that a full-time Dean of the Medical School be appointed. As a matter of fact, I was devoting probably more time to the actual deanship than the dean of any medical school in the country, as all of these men carried teaching loads in addition to their duties as dean. However, this outcry had little effect on me as it was agreed that as soon as the Council on Medical Education and Hospitals of the American Medical Association, and the Association of American Medical Colleges gave approval of the University of Utah Medical School, as a Class A institution, I could and would resign my position as Dean. Approval by these two organizations was given to the Medical School in 1944 and as soon as I could straighten out a few current problems, I resigned. Although my intentions had been known at all times to the Board of Regents and to the President of the University, it caught them "flat-footed" and they found it necessary to appoint a Committee of three to administer the deanship until they could appoint a successor — which took them about a year.

I was anxious to return to the private practice of surgery. I had experienced a rather hectic and strenuous four years, but with the help and advice of Victor Johnson, Secretary of the Council on Education of the A.M.A., and Fred Zapffe, Executive Secretary of the Association of American Medical Colleges, followed by the remarkable growth of the Medical School and its high standing among other medical schools in the country, I believe the contribution I made was worth while. I wish to thank and pay tribute to Dr. L. E. Viko for his help, advice, his encouragement and his backing as a Regent throughout this entire ordeal.

MEDICAL CLASSROOM ON WHEELS FOR RURAL SEMINARS

Teams of physicians from the faculty of the University of Utah College of Medicine will journey to communities in Utah and Arizona in a new medical classroom on wheels. This mobile unit, a station wagon with all medical teaching facilities, was presented to the University of Utah College of Medicine by The Commonwealth Fund so that the rural seminar program might be carried out more effectively. This rural medical program was established in 1952 by Dr. John F. Waldo, and during these past two years teams of physicians have visited all parts of Utah and Arizona to present a variety of medical discussions lasting from one to eight hours in length. Now with a completely equipped teaching unit, the seminars given in the rural areas should be of even more benefit to the physician who participates in the postgraduate educational program.

Some of the new teaching aids which are in the mobile medical unit include an electrocardiograph generating device, "a blackboard that glows in the dark," all types of slide and movie projection equipment, and a complete unit to demonstrate the care of a premature infant.

Utah medical societies will receive a list of the speakers and subjects available for presentation and need only write to the Division of Postgraduate Medical Education, 175 East 21st South, Salt Lake City, to plan a rural seminar in their area.

Medical Library

The branch of the University Medical Library at the Salt Lake County General Hospital, which will hereafter be known as the Medical-Nursing Library, hopes soon to move into quarters on the first floor of the new Surgical Wing. After the cramped space in the basement of the Nurses' Home which the Library has been filling for more than a year, this new room with plenty of shelf space and reading accommodations will seem like the wide open spaces. Faculty, staff and students, in fact, all "searchers after knowledge" will find it a good place to spend some time.

Some of the books from the library of Dr. Ralph T. Richards will be found in one or the other of the medical libraries; his notes on the history of medicine in Utah will also be in the medical library at the University, and after they have been arranged they may be consulted by others who are interested in the history of medicine.

The University of Utah Library of Medical Sciences offers the following services to the physicians of the state, and to alumni wherever they may be:

1. Loan Service. You may borrow medical books and periodicals from the Library.

2. Reference Service. You may refer questions to the Library, dealing with such matters as the location of journal articles, descriptions of techniques, addresses of physicians, bibliographical data, historical information, etc.

3. Bibliographic Service. You may request lists of references to medical literature on specific subjects. Or you may send your own reference lists to be checked for accuracy before publication.

4. Copying Service. The Medical Librarian can arrange for microfilming or photostating of articles, reproduction of illustrations, etc.

5. Consulting Service. The Medical Librarian will be glad to advise you on your hospital or personal library problems.

Neurosurgery Chief

Dr. Ralph Bingham Cloward (Class of '32), graduate of the University of Utah two-year School of Medicine, was recently appointed Professor and Head of the Department of Neurosurgery at the University of Chicago. Dr. Cloward received his training in neurosurgery at the Chicago University Clinics from 1935-1938. Since then he has practiced in Hawaii. Dr. Cloward won wide recognition for his work in head and spinal injuries during World War II. In 1946 he was cited by the Secretary of Defense for his care of military personnel during the Pearl Harbor disaster.

Mrs. Cloward, nee Florence Bauer, received her B.S. and M.S. from the University of Utah; the latter in 1934. They have three children, Kathleen, age 15, Karen 13, and Kerry 9. The girls are all looking forward to attending the University of Utah on completion of their studies in Honolulu.

Early in 1955 Dr. Cloward will return to Hawaii to resume private practice.

Where Are They?

C. Vard Zabriskie, '49, is now in residency training (Urology) at the University of Minnesota.

Cyril Callister, '44, visited Salt Lake recently. He is in surgical residency in Seattle, Washington, after a short stint in the Navy.

Junius W. McClellan, '49, now in the practice of Surgery in Flint, Michigan. Junius visited Utah this summer.

W. Walter Sutow, '45, holds a position in the Department of Pediatrics at the University of Texas in Houston.

Jim Nance, '51, Obstetrics and Gynecology, Springville, Utah.

Leonard N. Foote, '51, General Practice, Spanish Fork, Utah.